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REMARKS

Reconsideration is requested in view of the above amendments and the following remarks. Claims 1, 2, 7, 10, 16, 18 and 21 have been revised. Support for the revisions can be found in, e.g., Figs. 3, 4 and page 10-13 of the specification, among other places. Claim 24 has been canceled without prejudice. Claims 1-23 remain pending in the application.

Claim Rejections – 35 USC § 103

Claims 1-5, 7, 10-12, 14-22 and 24 are rejected under 35 USC § 103(a) as being unpatentable over Korein et al. (US 6,226,035). Applicants respectfully traverse this rejection. The rejection of claim 24 is moot in view of the cancellation of the claim. Applicants are not conceding the correctness of the rejection for claim 24.

Claim 1 requires a first optical unit and a second optical unit, where the second optical unit is optically separate from the first optical unit for preventing light passing along the second light path from passing along the first light path. Claim 1 also requires that switching be possible between imaging of the subject using the first optical unit and imaging of the subject using the second optical unit.

The present image sensor module can provide a plurality of optical units such that an object can be viewed by different view angles. Conventionally, a zoom lens is used for providing different view angles. One problem with the zoom lens is that its cost is much higher than a simple lens because it has to have a precision mechanism to adjust the zoom lens accurately. Another problem is that the size of a zoom lens is much larger than a simple lens because a zoom lens typically includes multiple simple lenses spaced at certain distances. As a result, a zoom lens is not typically used as a component of an image sensor module because of its relatively large size (see page 2, lines 1-10 of the specification, among other places). The invention of claim 1 helps provide various view angles by one image sensor module, while keeping the size of the image sensor module small and also keeping the cost for the image sensor module relatively low.

Korein et al. fail to teach or suggest that the second optical unit be optically separate from the first optical unit for preventing light passing along the second light path from passing along the first light path, as required by claim 1. Nor do Korein et al. teach

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or suggest switching be possible between imaging of the subject using the first optical unit and imaging of the subject using the second optical unit, as required by claim 1. Korein et al. merely discuss an optical system having an image sensor to generate an image of either a wide-angle view of an area of interest, or a direct view of an area of interest (see Korein et al., Abstract). Nowhere do Korein et al. disclose a second optical unit optically separate from a first optical unit for preventing light passing along the second light path from passing along the first light path, as required by claim 1.

The rejection relies on an image sensor 20 and a zoom lens 26 of Korein et al. as suggesting the first optical unit. In addition, the rejection relies on a wide-angle optical system 10 of Korein et al., including a convex mirror 12, a planar mirror 14 and a relay lens 16, as suggesting the second optical unit. As shown in Fig. 1 of Korein et al., all light beams entering the image sensor device 20 share the same light path in the zoom lens 26. More particularly, in Korein et al., the light beam that comes out from the wide-angle optical system 10 and enters the zoom lens 26 will share the same light path in the zoom lens 26 as any other light beam that is to enter the image sensor module (see Korein et al., Fig. 1 and col. 7, line 62 to col. 8, line 13). This is distinct from the invention of claim 1, which requires the second optical unit to be optically separate from the first optical unit for preventing light passing along the second light path from passing along the first light path, as required by claim 1.

Moreover, Korein et al. in fact discuss a zoom lens 26. As disclosed in the Background of the specification, the cost for manufacturing a zoom lens is significantly higher than a simple lens because it has to have a precision mechanism to accurately adjust the zoom lens. In addition, the size of a zoom lens is much larger than a simple lens because a zoom lens typically includes multiple simple lenses spaced at certain distances. As a result, a zoom lens is not usually used as a component of an image sensor module because of its relatively large size (see page 2, lines 1-10 of the specification, among other places). There would be no reason to modify Korein et al. by including the zoom lens 26 and the wide-angle optical system 10 in the same case.

For at least these reasons, claim 1 is patentable over Korein et al. Claims 2-5, 7, 10-12, 14-22 ultimately depend from claim 1 and are patentable along with claim 1 and

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need not be separately distinguished at this time. Applicants are not conceding the relevance of the rejection to the remaining features of the rejected claims.

Claim 6 is rejected under 35 USC 103(a) as being unpatentable over Korein et al. in view of Sheng (US 6,801,343). Applicants respectfully traverse this rejection. Claim 6 ultimately depends from claim 1 and is patentable over Korein et al. in view of Sheng for at least the same reasons discussed above regarding claims 1-5, 7, 10-12, 14-22. Sheng does not remedy the deficiencies of Korein et al. Applicants are not conceding the relevance of the rejection to the remaining features of the rejected claim.

Claims 8-9 and 23 are rejected under 35 USC 103(a) as being unpatentable over Korein et al. in view of Yamamoto (US 6,907,139). Applicants respectfully traverse this rejection. Claims 8-9 and 23 ultimately depend from claim 1 and are patentable over Korein et al. in view of Yamamoto for at least the same reasons discussed above regarding claims 1-5, 7, 10-12, 14-22. Yamamoto does not remedy the deficiencies of Korein et al. Applicants are not conceding the relevance of the rejection to the remaining features of the rejected claims.

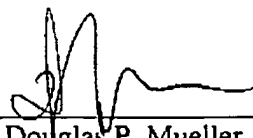
In view of the above, favorable reconsideration in the form of a notice of allowance is respectfully requested. Any questions regarding this communication can be directed to the undersigned attorney, Douglas P. Mueller, Reg. No. 30,300, at (612) 455-3804.

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Dated: March 12, 2008

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